The ultimate sound insulating wall system

**GypWall™ AUDIO** is a non-loadbearing, twin frame high performance wall system that provides exceptionally high levels of sound insulation. It is used to separate multiple use facilities such as lecture theatres, music rooms, multi-screen cinemas, conference centres, and leisure centres.
Key facts

- Exceptionally high levels of sound insulation
- Can exceed sound insulation requirements for cinemas equipped with high performance sound systems
- Can achieve high levels of sound insulation
- Up to 120 minutes fire resistance
- Satisfies BS5234 strength and robustness requirements for Severe Duty
- Can provide fire protection to structural steel within the wall cavity
- Lightweight, compared to masonry alternatives
- Can be built to a maximum height of 11.5 metres
- Gypframe GAB3 Acoustic Brace provides a resilient brace to give optimum acoustic performance
## Components

### Gyproc board products

<table>
<thead>
<tr>
<th>Component</th>
<th>Thickness</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gyproc WallBoard</td>
<td>12.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc FireLine</td>
<td>12.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc SoundBloc</td>
<td>12.5, 15mm</td>
<td>1200mm</td>
</tr>
<tr>
<td>Gyproc Plank</td>
<td>19mm</td>
<td>600mm</td>
</tr>
<tr>
<td>Gyproc DuraLine</td>
<td>15mm</td>
<td>1200mm</td>
</tr>
</tbody>
</table>

### Gypframe metal products

<table>
<thead>
<tr>
<th>Component</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypframe 92 S 10°C Studs</td>
<td></td>
</tr>
<tr>
<td>Gypframe 94C 70 Standard Floor &amp; Ceiling Channel</td>
<td></td>
</tr>
<tr>
<td>Gypframe 94DC 60 Deep Flange Floor &amp; Ceiling Channel</td>
<td></td>
</tr>
<tr>
<td>Gypframe 94 EDC 70 Extra Deep Flange Floor &amp; Ceiling Channel</td>
<td></td>
</tr>
<tr>
<td>Gypframe 99 FC 50 Fixing Channel</td>
<td>2400mm</td>
</tr>
<tr>
<td>Gypframe GF51 Fixing Strap</td>
<td>2400mm</td>
</tr>
</tbody>
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**May 2008**
Gyproc Jack-Point Screws
For fixing boards to stud framing 0.8mm thick or greater and T studs greater than 0.55mm thick.

Gyproc Wafer Head Jack-Point Screws
For metal-to-metal fixing 0.8mm thick or greater and T studs greater than 0.55mm thick.

Gyproc Sealant
For sealing airpaths to achieve optimum sound insulation.

Gyproc jointing materials
For seamless jointing.
Components
Fixing and finishing products

Gyproc edge beads
Protecting and enhancing board edges.

Gyproc Control Joint
To accommodate structural movement.

Gyproc FireStrip
For sealing deflection heads.

Fixing and finishing products

Gyproc Skimcoat, Gyproc Carlite Finish or Gyproc Board Finish
Providing a plaster finish.

Moy Plus Roll
For enhanced acoustic performance.

Stone mineral wool
62kg/m² slab.
Installation

1. Determine and mark the wall position and make allowances for openings.
2. Fix two rows of 94mm Gypframe Floor & Ceiling Channel using two rows of staggered fixings (by others) at 600mm centres in each channel, each row staggered by 300mm.
3. On uneven floors, 38mm deep timber sole plates may be required.
4. On new concrete or screeding, consider initially installing a damp proof membrane to the underside of the channels or sole plates.

Construction tips

- The following points should be considered in addition to the construction tips for GypWall™
- The estimated construction time is 0.5m² / man hour (nominal 6m high wall) ready for finishing
- Any openings will require careful detailing if the acoustic performance is to be maintained. Specialist heavy acoustic doorsets may require additional support. Contact Gypsum Industries Technical Sales Department for guidance.

May 2008
• Cut stud lengths to a neat fit (maximum possible entry into head channel), unless deflection head detailing is requested.

• Locate first stud, twist into position and fix to the abutting wall with suitable fixings (by others).

• Locate further studs at required centres (typically 600mm) to a friction fit within the channel sections - this allows for adjustment during boarding.

• Where studs are used at heights greater than 4m, consider locking into the floor channel using Gyproc Wafer Head Jack-Point Screws.

• The second framework is installed as the first, with stud frameworks spaced to achieve the specified wall thickness.

• Brace the two frameworks together by fixing short lengths of Gyprotech 99 FC 50 Fixing Channel, evenly spaced at 3600mm maximum centres, inserting four Gyproc Wafer Head Jack-Point Screws to each stud position.

• Braces are installed at mid-height for partitions up to 3600mm.
• Alternatively, where specified, fix Gypframe GAB3 Acoustic Brace to optimise the acoustic isolation. Install Gypframe Acoustic Braces at 3300mm maximum centres. Insert two Gyproc Wafer Head Jack-Point Screws to each stud position.

The Gypframe GAB3 Acoustic Brace may be cut using a hack saw or powertool. If required, the Gypframe GAB3 Acoustic Brace can be extended by fixing a short length of Gypframe 925 10 ‘C’ stud to one brace with 4 no. Gyproc Wafer Head Jack-Point Screws, ensure a 150mm minimum overlap. The short length of stud should also be fixed to the vertical studs with 4 no. Gyproc Wafer Head Jack-Point Screws.

Splicing ‘C’ Studs
• To extend ‘C’ studs, if required, splice and locking together with a minimum 600mm nested overlap.
• Fix together using three evenly spaced Gyproc Wafer Head Jack-Point screws through each flange.
• Apply Gyproc Sealant to both sides of frame perimeter to provide optimum acoustic performance.

Openings
• Construct openings so as to maintain the acoustic performance.
• Where specialist heavy acoustic doorsets are specified, these will require additional support. Contact Gypsum Industries for suitable detailing/guidance.

Board fixing
• Fix boards to all framing members at 300mm centres using the appropriate length Gyproc screws.
• Reduce centres to 200mm at external angles.
• Select appropriate screw length to provide a nominal 10mm penetration into the Gypframe Steel framing.
• Under layer boards do not require centre fixings.
• Where Gyproc Plank is specified, fix horizontally to framing members using two screws to each stud, including each cut end. Half-stagger end joints in alternate courses.